141, 142 (Carunculina texasensis, and C. glans), Ditto, XXX. 54-57 (Eurynia lienosa, E. subrostrata, and Lampsilis ventricosa satur).

Walker, "On Paludina coarctata and incrassata, Lea". Nautilus, Vol. XXVIII, pp. 121-127. Description of Campeloma lewisii.

WALKER, "Apical Characters in Somatogyrus, with Description of Three New Species." NAUTILUS, Vol. XXIX, pp. 37-41, 49-53. Description of Somatogyrus wheeleri, and S. amnicoloides.

WALKER and ORTMANN, "A New North American Naiad", NAUTILUS, Vol. XXV, pp. 97-100, Pl. VIII. Description of Arkansia (genus) and Arkansia wheeleri.

Note.—The paper of E. G. Vanatta entitled, "Unionidæ from Southeastern Arkansas and N. E. Louisiana", Nautilus, Vol. XXIII, pp. 102-104, should be compared for a list of species reported from the lower Ouachita, some of which may be yet located in Clark County sections of the river.

DESCRIPTIONS OF NEW SPECIES OF MOPALIA AND TRACHYDERMON.

BY HENRY A. PILSBRY.

Mopalia Lowei n. sp.

The ehiton is rather small, oblong, moderately elevated, carinate, the lateral slopes straight. The valves are irregularly mottled with ferruginous, sea-green and olive. The anterior valve has ten radial ribs, those at the suture bearing compressed tubercles, the others rounded tubercles. The intervals are also tuberculose, with some interstitial granulation. Valves ii to vii have low, tuberculose sutural and diagonal ribs, the lateral areas tuberculose and granular. Central areas with the jugal tract closely striate longitudinally, the striæ converging forward near the beaks, elsewhere subparallel, but slightly irregular in places. Pleural tracts having longitudinal ribs, near the ridge converging forward somewhat, becoming divergent towards the lateral borders. These are intersected by a system of much weaker eurved ribs radiating forward and laterally, forming oblong tubereles on the longitudinal ribs. The posterior valve is short,

nearly flat, with a broad, shallow posterior sinus, the scarcely raised mucro being at the posterior third.

The interior is nearly white, strongly striate across the central part, where some valves may show a green or pink stain. The posterior valve has a rather deep posterior sinus and a single slit on each side.

The girdle is rather narrow in dry specimens, and bears coarse processes covered with sharp white spines.

Length 23, width 12.2 mm.

San Pedro, California, collected by Mr. Herbert N. Lowe. Type no. 117951 A. N. S. P., paratype in Lowe coll., no. 1538.

This species is related to *M. sinuata*, *M. imporcata* and *M. porifera*, but it apparently differs from all of them by the profusely spiny girdle processes, which are not exclusively localized at the sutures, though often present there, as well as scattered over the girdle elsewhere. The allied forms mentioned are all from northern localities.

In some of the specimens there are 10 to 12 ribs on the anterior valve. The younger shells are suffused with lilac inside.

MOPALIA IMPORCATA LIONOTUS II. subsp.

This chiton agrees closely with *M. imporcata* except that there is a narrow, smooth jugal tract. The lateral areas are granose between the coarsely tubercular diagonal and sutural ribs. The anterior valve has 10 ribs. Posterior valve is depressed behind the mucro, which is at the posterior fourth. Interior light Niagara-green, darker posteriorly on each valve. The girdle bears branching processes, often like the branches of spines on a cactus. These are scattered, sometimes sutural.

Length 15.5, width 9 mm. Divergence 95°.

White Point, collected by Mr. H. N. Lowe. Also San Pedro, same collector. Type no. 117952 A. N. S. P.; paratype no. 1542 Lowe coll.

MOPALIA MUSCOSA LAEVIOR n. subsp.

This name has long been used in the collection for the form

figured and described in Man. Conch., vol. 14, p. 300, pl. 63, figs. 60, 61. It is from Olympia, Wash.

TRACHYDERMON LOWEI n. sp.

Oval, rather depressed, dirty buff, a little darker towards the beaks, which project somewhat. Surface of the valves finely, closely and evenly granose throughout, the granules oblong. The anterior valve and posterior area of the posterior valve have a few very weak, low radial impressions. The mucro of the posterior valve is slightly post-median, but little raised, the slope behind it being convex towards the edge. The interior is white, stained buff or pinkish near the sinus, where it is conspicuously porous. The eaves are wide and closely porous throughout. Teeth smooth, those of the posterior valve being directed forward. Girdle is densely covered with minute elongate scales.

Length about 17, width 12 mm. (San Pedro).

Length about 19, width 13 mm. (San Pedro).

Length about 16, width 11 mm. (White Point).

San Pedro, Cal. Collected by Mr. H. N. Lowe. Type no. 117955 A. N. S. P., paratype no. 1545 Lowe coll.

This species is much more distinctly granulate than T. raymondi, and the eaves are much wider and more porous.

The paratype in Lowe coll. is from White Point. There is also a smaller specimen, red with blue-green spots, from San Pedro, but as it has not been disarticulated I do not feel certain of its identity.

Description of New Species of Shells Chiefly from Magdalena Bay, Lower California. By W. H. Dall. (Proc. of the Biol. Soc. of Washington, vol. 31, pp. 5-8, 1918.) The following new species are described: Scintilla chloris, Macron orcutti, Phenacolepas magdalena, Trichotropsis lomana, Liotiv rammata, L. olivacea, L. cookeana, and three new varieties.